

“Comparative Advantage”: The Advantage of the Comparatively Powerful?

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Overview

- The doctrine of “comparative advantage”:
 - Solves a particular theoretical problem for Ricardo
 - Reconciling the LToV with different relative productivities in different nations
 - By using Hume’s “On the Balance of Trade”: specie flow and QToM
 - As a bonus, produces “optimal” production specialization
- A lot of holes in the optimality argument...
- An “esoteric” doctrine: we teach comparative advantage *simplicity* because
 - The *real* arguments for free trade are too complex
- “Esoteric” doctrine more or less convincing, according to taste, ideology, &c....
- And neglect the Negishi social welfare weights:
 - The market is a machine for satisfying the wealthy
 - Because the market maximizes a SWF in which your weight is proportion to your wealth (or the cube of your wealth)

David Ricardo: The Apotheosis of the Market

- **David Ricardo:** *Principles of Political Economy and Taxation* (1817):
 - “Under a system of perfectly free commerce, each country naturally devotes its capital and labour to such employments as are most beneficial to each. This pursuit of individual advantage is admirably connected with the universal good of the whole... distribut[ing] labour most effectively and most economically... increasing the general mass of productions... diffus[ing] general benefit, and bind[ing] together by one common tie of interest and intercourse, the universal society....”
 - “It is this principle which determines that wine shall be made in France and Portugal, that corn shall be grown in America and Poland, and that hardware and other goods shall be manufactured in England...”



David Ricardo: Trade and Comparative Advantage in Equilibrium

- **David Ricardo:** *Principles of Political Economy and Taxation* (1817):
 - “England may... produce the cloth... [with] the labour of 100 men for one year; and... the wine... 120 men.... England would therefore find it her interest to import wine, and to purchase it by the exportation of cloth. To produce the wine in Portugal.. 80 men... and... the cloth... 90 men....
 - “It would therefore be advantageous for her to export wine in exchange for cloth...notwithstanding that the commodity imported by Portugal could be produced there with less labour than in England.... It would be advantageous to her rather to employ her capital in the production of wine, for which she would obtain more cloth from England, than she could produce by diverting a portion of her capital from the cultivation of vines to the manufacture of cloth...”



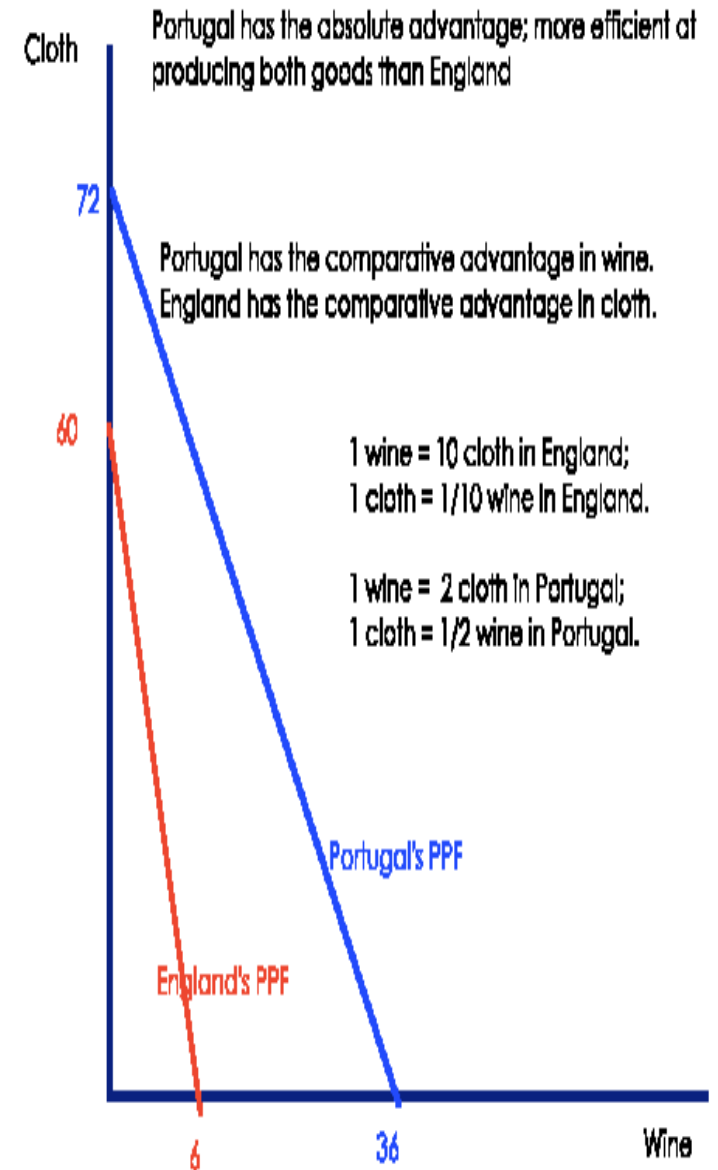
Comparative Advantage Solves an Intellectual Problem for Ricardo

- Ricardo's intellectual problem:
 - Wages-fund working-capital theory of production...
 - Labor-value prices within each country...
 - How then is:
 - Trade possible should one country be more productive at making everything than another?
 - Shouldn't all capitalist production move to the more efficient country?
 - Leaving only subsistence agriculture in the less efficient?
 - Lewis/Harris-Todaro framework in the background?



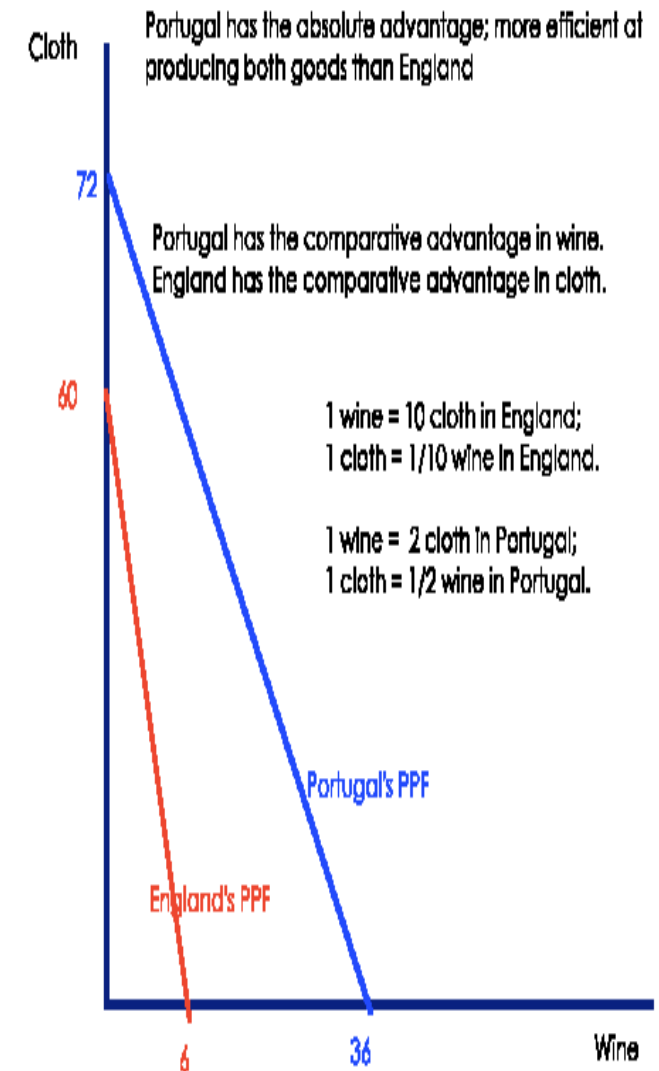
Comparative Advantage as Ricardo's Solution

- Assume: No international capital mobility
- Assume: Specie flow to balance payments in the event of unbalanced trade
- Assume: Labor theory of value within each country
- Assume: Quantity theory of money driven by specie stocks
- Hence
 - Local labor value relative prices within each country
 - But countries have different overall price levels
 - Hence trade profitable to merchants who buy at labor value relative prices in one country and sell at labor value relative prices in the other
 - Specialization according to comparative advantage in equilibrium
 - And money is a veil: terms of trade are *as if* barter...



Note: David Ricardo's "Comparative Advantage" Is a Complex Argument

- Ricardo's assumptions:
 - Working-capital-in-advance production technologies
 - Labor value prices (within a country)
 - Country- and sector-specific labor productivities
 - Specie flows to balance international payments
 - A nation-level quantity theory of money depending on specie stocks
 - No international capital mobility
- Ricardo's conclusions:
 - Surplus from trade captured by merchants
 - Money a veil
 - Optimal international specialization
- "Free trade best because comparative advantage" a very stripped-down version...



Note: David Hume: The Demolition[?] of “Mercantilism”

- Use reason to dispel prejudice and “superstition”
- Systems thinking, emergent properties, and stable equilibrium
- Of the Balance of Trade (1752): Conclusion
 - “A government has great reason to preserve with care its people and its manufactures. Its money, it may safely trust to the course of human affairs, without fear or jealousy. Or if it ever give attention to this latter circumstance, it ought only to be so far as it affects the former...”



Note: David Hume: The Appeal to Emergent Properties of Equilibrium

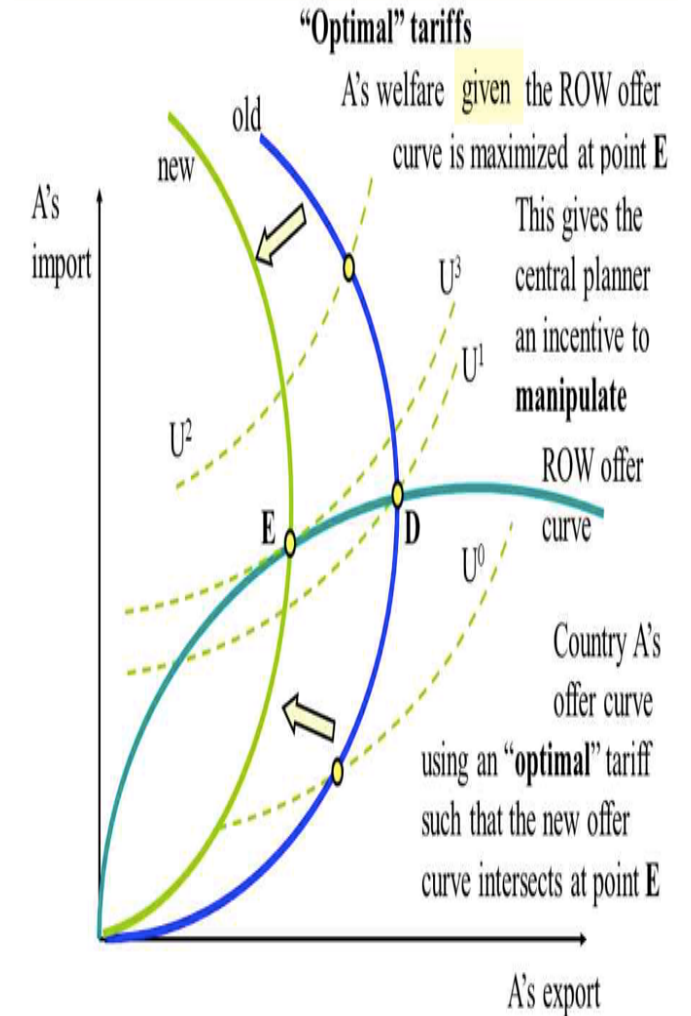
- Of the Balance of Trade (1752): Argument:
 - “Suppose four-fifths of all the money in GREAT BRITAIN to be annihilated in one night.... Must not the price of all labour and commodities sink in proportion, and every thing be sold as cheap as they were in those ages? What nation could then dispute with us in any foreign market?... In how little time, therefore, must this bring back the money which we had lost, and raise us to the level of all the neighbouring nations?...”
- Note: not a completely convincing argument:
 - Much more an argument that there are powerful limits to “mercantilist” policies that seek to bring specie within the potential control of a government than a refutation
 - The refutation comes with Adam Smith’s redefinition of the goal of state policy as a wealthy nation...



Holes in David Ricardo's Argument for Free Trade as in Some Sense "Optimal"

- Hole 1: Optimal tariff
 - Shift the terms-of-trade in your favor
- Hole 2: Un- and underemployment
 - Exports move workers from subsistence agriculture to capitalist production
 - Exports reduce industrial unemployment
- Hole 3: Externalities as sources of economic growth
 - Economies of scale
 - Learning-by-doing
 - More broadly, communities of engineering practice
 - Focus of inventive activity
- Hole 4: Internal distribution
 - Market does not seek "greatest good of the greatest number"
 - Hence the late 19th C. "social Darwinist" redefinition of the social welfare function

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Hence the “Esoteric” Arguments for Teaching Comparative Advantage

- Optimal tariff rebuttal: **unstable in a game theory sense**
- Un- and underemployment rebuttal: **better macro policy superior tool**
- Externalities as sources of economic growth rebuttal: **industrial policy a trap**
 - **Very few countries have both the administrative competence and the administrative autonomy to successfully conduct industrial policy**
- Internal distribution rebuttal:
 - **“social Darwinist” redefinition of the social welfare function**
 - **the same political system that produced unequal wealth distribution cannot be trusted**
 - **ignore...**

Hole 5: External Distribution

WELFARE ECONOMICS AND EXISTENCE OF AN EQUILIBRIUM FOR A COMPETITIVE ECONOMY

by Takashi Negishi, Tokyo.

1. - The proof of the existence of an equilibrium for a competitive economy is given by Arrow and Debreu [1] and many others such as Gale [4], Kuhn [6], McKenzie [8], [9], and Nikaido [10]. In this note, we shall give another proof of the existence of an equilibrium, putting emphasis on the welfare aspect of the competitive equilibrium (*).

As is well known, an equilibrium point of an economic system under perfect competition is an efficient state in Pareto's sense in which we cannot make anyone better off without making someone worse off. In other words, it can be said that a competitive equilibrium is a maximum point of some properly defined social welfare function subject to the resource and technological constraints.

In the following, we shall show that a competitive equilibrium is a maximum point of a social welfare function which is a linear combination of utility functions of consumers, with the weights in the combination in inverse proportion to the marginal utilities of income. Then, the existence of an equilibrium is equivalent to the existence of a maximum point of this special welfare function. Therefore, we can prove the former by showing the latter.

2. - Let us construct our economic model, the existence of whose equilibrium we shall prove, as follows. Let there be m goods, n consumers, and r firms. Let x_i be a consumption vector (whose element is $x_{it} \geq 0$), \bar{x}_i be an initial holding vector (whose element is $\bar{x}_{it} > 0$), and $U_i(x_i)$ be the utility (function) of the i^{th} consumer. Let y_k be a production vector of the k^{th} firm whose element $y_{kj} > 0$ (< 0) is the output (input) of the j^{th} good, and Y_k be the possible set of y_k , i. e., the set of y_k which satisfies the restriction on production $F_k(y_k) \geq 0$. Let P (whose element $P_j \geq 0$) be the price vector. For a non-free good, $P_j > 0$. Let λ_{ik} be the proportion of profit of the k^{th} firm distributed to the i^{th} consumer.

We define an equilibrium point under perfect competition:

Definition 1. The following are the conditions of an equilibrium point (x_i, y_k, P) :

(*) The author wishes to express his gratitude to Prof. K. J. Arrow and Mr. H. Uzawa, both of Stanford University, for their valuable suggestions. This work is supported by the Office of Naval Research, U.S.A.

- Even if the internal distribution of wealth in each country is acceptable...
- Remember: Negishi social welfare weights:
 - Market maximizes a social welfare function...
 - The market's social welfare function is a weighted sum of individual utilities...
 - Where each individual's weight ω is the inverse of their individual marginal utility of wealth W :
 - $[U = \ln(W)] \Rightarrow [\omega = W]$
 - $[U = -(W^{-2})/2] \Rightarrow [\omega = W^3]$
- In that sense, "comparative advantage" *has* to be the advantage of the comparatively well-off. It cannot be otherwise